No 10

An
Inaugural Essay
on
Pneumonia
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Pneumonia

It is observed somewhere by a celebrated author, that original genius is seldom to be found in a country where the literary taste is formed and the light of knowledge equally diffused among its citizens. The number of cultivated minds which there abound, continues the same author, resemble a forest of thick and flourishing trees, where no single individual is permitted to rear his head far above the rest. Where trade is in few hands, we meet with a small number of overgrown fortunes in the midst of a general poverty; and in proportion to its extension, we find opulence general, and great fortunes rare.

The preceding observation, tho' made of knowledge in a general point of view, is no less applicable to the several branches of knowledge, among which may be reckoned medicine. The equal diffusion of

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medical knowledge among the medical world, prevents any single individual from rearing his head far above his brethren. The general and liberal cultivation of this branch of knowledge, aided and promoted by means of the press, contribute to preserve this equality. Hence we see no solitary towering of medical genius; we see no Hippocrates

It is true, medicine is, as yet, very far from an approach to perfection: but this, so far from invalidating the preceding remarks, only proves the great difficulty of the science, arising from the mysterious nature of the laws which govern the animal economy

Owing to this inherent difficulty of the subject, some eager spirits, ambitious of a name, and impatient of slow induction, have, in the fruitfulness of their own imaginations, attempted to account for every thing, by a favourite and gratuitous hypothesis. Of the theories which have thus been attempted, some have perished in the conception, some have proved abortive, and others, tho' having had the good fortune to sparkle through an

ephemeral existence, have soon followed their founders to the forgetfulness of the tomb; or else, have been held up as marks of ridicule to the philosophical world.

Notwithstanding, however, the encumbrance of such theories, it must be confessed that at no former period has the science of medicine exhibited more minuteness of detail, and perfection of description, than at the present moment. Scarcely a disease can be mentioned which has not been treated of by medical writers, and handled with a degree of precision, which almost precludes further improvement; until, at least, some more general principle than we yet profess shall serve to guide us in our enquiries. Certainly, no disease is better understood and described than Pneumonia, the subject of my dissertation. Amidst therefore, this general profusion of medical detail, where it would seem one had nothing, but to select, compile and arrange, it is not to be expected that any thing new or interesting should be advanced; or indeed that ground should be taken, which had not been

occupied a thousand times before, and in some measure, consecrated to the use of others by previous occupancy, or long and established prescription. In treating, however, of Pneumonia, I may be permitted to make or perhaps, more properly to interpolate whatever remarks may seem to arise out of the subject or indeed be connected with it by any remote analogy

Pneumonia, in its literal sense signifies inflammation of the Lungs; but in its general acceptation, is made to include both the Lungs and their investing membrane. By medical writers it is commonly divided into Peripneumony and Pleurisy; the latter having reference to the Pleuræ, and the former to the parenchymatous portion of the Lungs But, as we have no set of diagnostics by which to distinguish one from the other; as dissection discovers the same phenomena in both instances, and proves that the Lungs are never inflamed without the Pleuræ and reversely, the Pleuræ, never with-

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Having thus the distinction between Pneumonia and Typhus as which I would have it made, I say that whether I may more in name or Pneumonia or in other words Pneumonia Typhoidea, may be considered as equally applicable to both these diseases

Perhaps there is no disease more certainly characterized by its symptoms than Pneumonia Inflammatoria. However various its character or its degree of violence, it is always attended, as

justly remarked by Dr. Cullen, with these four symptoms, namely, fever, difficult breathing, cough and pain in some parts of the thorax. These are the most prominent symptoms, subject however, to many modifications, in proportion to the degree of violence, or lenity of the disease, and carrying each in its train a band of minor symptoms

The fever may be gradual and mild in its approach, or sudden and violent in its attack attended with a full, strong, quick and hard pulse imparting to the fingers a thrill-like sensation; also with increased heat white tongue high colored urine, depression of strength, and other symptoms which commonly attend fever. The pulse however, is sometimes low and soft especially in the advanced stage of the disease

The difficulty of breathing is always greatest during inspiration: and this arises from the difficulty and pain, attendant on the dilatation and action of the affected lungs by the

inspired air. Hence expiration while in a recumbent position is performed with more ease. The difficulty of breathing is also varied in some measure by the posture of the body. It is commonly greatest when the patient lies on the affected side, tho' the contrary sometimes happens. At other times a person must sit upright on his back; and this can not be done at all times in an erect posture. This last may be considered a very dangerous symptom, as indicating great extent and violence of the disease.

The cough varies considerably in urgency and violence. At first it is attended with little expectoration, and is of a dry and tedious nature. As the disease advances the expectoration becomes more copious and of greater consistence; and is for the most part streaked with blood. Sometimes, indeed, the expectorated matter is almost entirely of blood; but without these copious hæmorrhages which especially attend pulmonary hæmoptysis

The pain may be either sharp and pun-gent, or dull and obtuse, accompanied with rather a sense of weight and oppression, than of acute feeling. At one time it is fixed and at another, shooting in various directions through the chest. It may be felt either under the breast bone, or in the back between the shoulders; but its most common seat is in the side. In fine, it may occupy any part of the thorax.

Amongst the causes of Pneumonic Inflammation there is none which so strongly claims our attention as cold both on account of the frequency of its occurrence, and the certainty of its pernicious influence. In a great majority of cases, Pneumonic Inflammation may be traced to this cause. But cold in its impression on the system may depend on a variety of circumstances; — It may depend on vicissitude of weather, on change of clothing, or on partial exposure

It may not be improper to remark here

that vicissitude of weather is not attended with injurious consequences, unless it be sudden. It is the suddenness of the vicissitude rather than the vicissitude itself which constitutes the noxious cause, and deranges the functions of the animal economy. If the vicissitude of the weather be slow and gradual in its progress, the body has time to accommodate itself to the approaching change, and we see no catarrhs, no Pneumonic Inflammations. But if on the contrary, the vicissitude be quick and sudden, the body is surprised in an unprepared state, and falls a victim to the above-mentioned diseases, which now abound throughout the country. Hence we see the prevalence of inflammatory complaints during the spring when the weather is remarkable for the frequency and suddenness of its changes

It would indeed seem that the human body has a wonderful capacity of accommodating itself to surrounding circumstances; and hence the reason that natives of a sickly climate live not

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the usual term of longevity, and the manufacture breathes with impunity the noxious vapours of a loathesome dungeon. This dispensing principle however, of the constitution, requires time for the exertion of its energy. It can not all at once wear off the evil effects arising from new and unusual situations. It is for this reason that most of the miserable wretches who are transported from Africa to the West-Indies live but a short time after their arrival and commonly die in what is called the seasoning. It is for the same reason also, that the culprit mentioned by Lametherius, when brought into the pure air was taken ill, and could not be relieved, till carried back to his former noisome habitation. If such then be the evil effects of new and unusual situations, that even a change from bad to pure air, when made too suddenly is prejudicial to the constitution. How easy is it to suppose the evil consequences which arise from the sudden impression of cold on the system, whether this

impression be made by moisture or weather by change of clothing, or by partial exposure.

There is perhaps no disease, which requires a closer attention from the physician, than Pneumonic Inflammation: it demands a more prompt and vigorous practice. It is very well known that inflammation, when it attacks the pulmonary system or its neighbourhood, advances with rapid strides; and if not timely arrested, is apt to make a havoc on those parts, which cannot at no date can afterwards remedy.— Suppuration ensues; the patient becomes consumptive, and drags out the remnant of his days in a miserable existence, or else, sinks at once into an untimely grave. But even admit, the disease does not advance this far;— suppose the patient gets about again; he may yet have been imperfectly cured; adhesions may have formed; organic derangement may have taken place: and the patient be forever afterwards, predisposed to a repetition of the disease. Having, therefore the dis=

case, either as tending to a fatal extreme itself, or, by an imperfect cure, predisposing the constitution to similar attacks, it is obvious that an energetic practice is equally required in both instances. Timid measures would be criminal; and while the patient with a timid practice, would be tantalized by the illusive hope of recovery, the violence of the disease would be advancing with all the certainty of a dreadful reality.

But happily, for mankind, we here have a remedy as safe and efficacious, as the disease is dangerous and violent. This remedy is venesection; and without it we should not be able to do any thing. It is indeed the sheet anchor on which rest the hope and safety of the patient. but venesection in order to be successful must depend upon two circumstances. It must be made on large quantity and through a large orifice.

If only a small quantity of blood is drawn, the system may indeed experience relief but it is

only temporary. The inflammation like a fire, partially extinguished, breaks out afresh, and resumes all its former force. Blood, indeed, may again be drawn; the patient may again find relief — and the disease again return; until the wearied patient worn out by repeated loss of blood and repeated aggravation of the disease, shall at length sink below to recover. But if a large quantity of blood is drawn the disease is at once cut short. The inflammation is arrested in its progress, and gives way to the curative efforts of the constitution. In this case it will be necessary to bleed until there is an evident amelioration of all the symptoms, or the patient faints.

But moreover; the relief obtained from the abstraction of a large quantity of blood will be greater and more durable if the orifice be a large one. Sydenham had observed this. He remarked that when the blood trickled down beside the arm, instead of issuing off in a horizontal stream the effect was not near so salutary. A man of a great practical mind, he

was acquainted with the fact, but did not trouble himself with accounting for its principle. It belonged to Forbyce to attempt this; and to give at least an air of plausibility to his reasonings. But whatever may be the principle of its operation it is now confessed by practitioners on all hands that the detraction of blood from a large orifice is attended with advantages to be derived from no other mode of practice

But as warmly as I recommend a bold and vigorous use of the lancet in Pneumonic Inflammation, I would nevertheleys be understood with proper limitations. It is a well known fact, that when an epidemic pervades a country it subjects all minor diseases to its dominant influence and forces them, in a great measure to wear its livery. When an epidemic, for example prevails, of a typhoid type. Pleurisy, Catarrh, and all other diseases of a sporadic nature, partake of the same typhoid character, and as copious bloodletting

would be dangerous in the one instance, so it would be equally prejudicial in the other. I once knew a patient taken down with violent symptoms of Pneumonia. The attending physician guided by the symptoms of disease so well marked, bled the poor man quite freely and copiously. The consequence was that the symptoms soon assumed the typhoid nature of the reigning epidemic, and the patient sunk into a state of debility from which he never recovered. — In cases of this kind therefore, it is best to be cautious: — to draw more in small quantities and to watch the symptoms

Next to bloodletting, blisters are the most important of our remedies in this disease. It is a question among practitioners at what time these should be applied. Some contend that their application should be simultaneous with the detraction of blood; while others on the contrary, maintain that they ought not to be applied until the system is in some measure reduced by the previous use. The lan=

cet. Opinions are equally respectable on both sides, and success has attended both modes of practice. Nevertheless, I am inclined to believe that the application of a blister, before the activity of the pulse is considerably abated by venesection is always attended with some degree of risk, consisting the exacerbation of febrile symptoms, which is apt to follow the lancet. If a blister it would seem upon the whole to be the best practice, first, to reduce the activity of the pulse to the proper standard of excitement; and secondly, after this to apply a large blister plaister, immediately over the seat of the pain.

This constitutes the most important part of the treatment of Pneumonic Inflammation, and frequently the disease will yield to this treatment alone. But it is usual at this stage, when the violence of the symptoms is in a great measure abated to administer some antal diaphoretic. Whether diaphoretics possess the importance

which is commonly observed there on the treatment of disease, & have not time at present to discuss. It is sufficient for any present purpose, that I merely mention the usual routine of practice. To produce therefore a gentle perspiration the antimonial powder will perhaps answer as good a purpose as any: and it is alleged to possess this advantage, that at the same time it produces a determination to the surface, it also promotes expectoration, so exceedingly at this period. — To break down and dissolve the tenacious phlegm which often teases the patient about this time nothing, I am inclined to believe, is superior to the inhalation of warm vinegar and water. This moistens and stimulates the bronchial cells to a more abundant secretion, which mixing with the tenacious phlegm lessens its cohesion and promotes its discharge

And here I may mention that it seems to me extremely probable, that expectoration, or, to

speak more accurately, the generation of phlegm is not the cause but the effect of convalescence. The disease has taken a favourable turn, and the natural consequence is the accumulation of a thick and yellow matter in the trachea and bronchial cells. Just as in catarrh, when the patient begins to get better, the secretion of the Schneiderian membrane, assumes a thick and yellow appearance. This pituitous accumulation, therefore, in the bronchial cells, being the necessary consequence of a favourable turn in the disease expectorants, so called, can do no more than assist in its expulsion

At the close of the disease, the patient is sometimes affected with a troublesome cough, which continues to linger by him, when all other symptoms have disappeared. For this there is no remedy better than opium. I have known a case where this cough, having been kept up two months, was at once put a stop to by the administration of an opiate pill. By what magic influence the medicine thus

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operation, it is difficult to tell. The fact only, I relate

It seems almost unnecessary to mention, that, as co-operating with the preceding plan of treatment the bowels ought to be kept gently open, and the antiphlogistic regimen strictly adhered to. These indeed, are indications to be fulfilled in almost all diseases.